

UNITED KINGDOM

47 PATEL Ben
Specialist Tariffs
Cable & Wireless
29 Red Lion Square,
LONDON WCI 4HQ
Tele. : +44 171 315 4459
Fax. : +44 171 315 6260

SYRIA

48 HANNA Joseph
Director of Internal Control
Syrian Telecommunication
Establishment (STE)
Damascus-Mazeh, Syria
Tel. : +963 11-6122382
Fax : +963 11 6122100

49 SALEM M. Saleh
Deputy Director of Exploitation
& Traffic Dept.
Syrian Telecomms. Establishment (STE)
PO Box 11774, Damascus, Syria
Tel. : +963-11-6122234
Fax. : +963-11-6121234 / 6121252

50 RAMZI Ramadan
International Relations Manager
Syrian Telecomm. Establishment
Damascus, Syria
Tel. : +963-11-6122315
Fax. : +963-11-6121315

51 NAHAS Noora
Traffic Section
Syrian Telecomm. Establishment
Damascus - Mazeh, Syria
Tel. : +963 11 6122234
Fax. : +963 11 6121234

52 BAGHDADI Riyad
International Tariff Department
Syrian Telecomm. Establishment
PO Box 11774
Damascus, Syria
Tel. : +963-11-6122375
Fax. : +963-11-6121234/6121252

53 ANOUSH Ibrahim
Chief of Interior Investment
Syrian Telecomm. Establishment
Damascus - Mazeh, Syria
Tel. : +963 11 6122238
Fax. : +963 11 6121238

ITU

54 TANAKA Saburo
Councillor
TSB / ITU
Place des Nations,
CH-1211 Geneva 20
Switzerland
Tel : 41 22 7305989
Fax : 41 22 7305853

Annex 2
(to Part I)

LIST OF DOCUMENTS

<u>No.</u>	<u>Source</u>	<u>Title</u>
<u>White contributions</u>		
TAS-10	TSB	Inquiry into the accounting rates applied to telephone and telex relations in TAS Region
TAS-11 services	Telecom New Zealand	Future issues for study - Differencies in costs between various
TAS-12	Telecom New Zealand	Future issues for study - Other telephone services
TAS-13	TSB	Inquiry on the results of the cost study for inward IDD services
TAS-14	TSB	Application of cost model to accounting rates
<u>Delayed contributions</u>		
D 1	KDD Japan	Some reflexions on Internet
D 2	Jabatan Telekom Malaysia	Regulating the Malaysian telecomm. industry in a multi-operator environment
D 3	Japan	Expected role of TAS in development of Internet
D 4	Korea Telecom	Determination of the return on investments : revisited
<u>Temporary documents</u>		
DT/1		Draft agenda
DT/2	TSB	SG 3 new Questions (1997-2000)
DT/3	TSB	Results of the study on "call-back"
DT/4	TSB	Recommendation D.500 R adopted in 1993
DT/6	TSB	Provisional list of participants

Temporary documents (cont.)

DT/7	Chairman	Presentation on regulatory changes
DT/8	Chairman	TAS Group report to SG 3 meeting (March 1996)
DT/9	TSB	Summary report of SG 3 on "call-back"
DT/10	TSB	Presentation paper on least cost routing
DT/11	Chairman	Draft revised Recommendation D.500 R
DT/12	Chairman	Revised text for cost study Questionnaire
DT/13	Chairman	Summary decisions

ANNEX 3
(to Part I)

TAS Group Cost Elements for Inward IDD Services

A. DIRECT RELATIONS

I Direct Costs

Facility, Investment & Operating Costs

1. International Exchange Cost
 - International Telecommunication Maintenance and Operation Centre
 - Telephone Exchange
 - Associated Transmission & Signalling Equipment
2. Earth Station
3. Cable Station
4. Submarine/Terrestrial Cable System
5. National Links Between Earth Stations and Cable Landing Station and International Exchanges and Between International Exchanges
6. International Terrestrial Radio Links

Note: Investment means depreciation or replacement expenses. Operating means operation and maintenance costs associated with these facilities and should include costs incurred during the year on regular and normal repairs; consumable materials, electricity and other utility charges; rentals; labour costs of staff providing operation, repair and maintenance.

Rental and Lease Cost

1. Space Segment
2. Facilities Where Applicable (for example leasing an exchange)
3. Administration Lease

National Extension Cost

- A. Combined International/National ROA investment and operating cost
 1. National exchanges

2. National transmission facilities
 3. Local loop, if applicable and identified under a bilateral or multilateral agreement
or
- B. Separate International and National ROA
- Payment by International ROA to the National ROA on the basis of:
1. Per Minute
 2. Annual Lump Sum
 3. Revenue/cost Sharing
(e.g percentage of International collections), or
 4. Combination of any above three

Cost of Funds Invested

1. Interest and Charges on Borrowed Funds
2. Reasonable Return on Own Investment

II Indirect Costs

- A. General Administration (non-facility)
1. Human resources and human resources development
 2. Building and its support services (depreciation)
 3. Office Equipment (depreciation)
 4. Transport and travel
 5. Management system (e.g accounting system)
- B. Appropriate Taxes or Equivalent

III Other Related Costs

Other costs may qualify for inclusion by bilateral agreement,

e.g - *Temporary Alternative Routing (Overflow Transit) (1)*

- Direct and Indirect R&D Costs

Note (1): Inclusion of transit costs are applicable only for incoming terminating overflow traffic where Recommendation D.155 divisioning of accounting rates is observed.

B. *INDIRECT RELATIONS*

I. *IDD Direct Relation Cost on the Route from the last Switched Transit Provider*

II. *Switched Transit Cost*
Half the switched transit provider's (or providers') published transit charge (or charges)

Note: *If there are more than one transit provider, ie a double transit route, then the switched transit cost is half the sum of the Transit providers' published transit charges.*

Apportionment Methodology for an Incoming IDD Telephone Traffic Cost Model

The apportionment methodology below assumes each ROA has determined the total cost of each element defined in a preceding section "TAS Group Cost Elements For IDD Service", for a given year.

Section A - Total Cost (All Services) Apportionment to the Telephone Service

Allocation of a portion of total costs for each element, as discussed above, must be made to the Telephone service only. The following apportionment methodology is adopted by the TAS Group.

Each ROA may use reasonable apportionment methodology, if any, other than the apportionment methodology below.

A. DIRECT RELATIONS

I Direct Costs

Facility, Investment & Operating Costs

1. International Exchange Cost

- International Telecommunication Maintenance and Operation Centre

Total ITM&OC costs should be apportioned to the telephone service according to reasonable methodology such as the ratio of bearer capacity by which the establishment of international circuits for the telephone is reasonably made distinct.

Total ITM&OC Costs Apportioned to Telephone =

$$\frac{\text{Telephone ITM\&OC Bearer Capacity}}{\text{All Services Total ITM\&OC Bearer Capacity}} * \text{Total ITM\&OC Cost}$$

Note: This method is named the Bearer Capacity Basis

- Telephone Exchange

- Associated Transmission & Signalling Equipment

The above two international exchange costs are apportioned in total to the telephone service in principle.

2. *Earth Station*

Total Earth Station Costs Apportioned to Telephone =

$$\frac{\text{Telephone Satellite Bearer Capacity}}{\text{All Services Total Satellite Bearer Capacity}} * \text{Total Earth Station Cost}$$

3. *Cable Station*

Firstly, cable station costs are allocated to a particular cable systems based on their design use E.g a cable station supporting two cable systems: Cable A = 5,000 bearer circuits and Cable B = 2,000 bearer circuits

$$\begin{aligned} \text{Cable A Allocation} &= \frac{\text{A design capacity}}{(\text{A+B}) \text{ design capacity}} * \text{Total Cable Station Cost} \\ &= \frac{5,000}{7,000} * \text{Total Cable Station Cost} \\ \text{Cable B Allocation} &= \frac{2,000}{7,000} * \text{Total Cable Station Cost} \end{aligned}$$

Secondly, each portion of the cable station cost (A+B) is then allocated to the telephone service based on cable system usage:

Portion A of Total Cable Station Costs Apportioned to Telephone =

$$\frac{\text{Telephone Cable A Bearer Capacity}}{\text{All Services Cable A Bearer Capacity}} * \text{Portion A Cable Station Cost}$$

Portion B of Total Cable Station Costs Apportioned to Telephone =

$$\frac{\text{Telephone Cable B Bearer Capacity}}{\text{All Services Cable B Bearer Capacity}} * \text{Portion B Cable Station Cost}$$

4. *Submarine/Terrestrial Cable System*

Total Submarine/Terrestrial Costs apportioned to Telephone =

$$\frac{\text{Telephone Submarine/Terrestrial Bearer Capacity}}{\text{All Services Submarine/Terrestrial Bearer Capacity}} * \frac{\text{Total Cable Submarine}}{\text{/Terrestrial Bearer Capacity}}$$

5. *National Links Between Earth Stations and Cable Landing Station and International Exchanges and Between International Exchanges*

Apportioned to telephone on the above mentioned bearer capacity basis.

6. *International Terrestrial Radio Links*

Apportioned to telephone on the above mentioned bearer capacity basis.

Rental and Lease Cost

1. *Space Segment*

Space segment rental costs should be able to be identified on a service basis and therefore can be easily apportioned to telephone. Where a satellite bearer is shared between services the apportionment to telephone can be achieved on a sub-bearer capacity basis.

2. *Facilities Where Applicable*

The lease cost of facilities (eg telephone exchange) can be apportioned to telephone using the methodology outlined in "Facility Investment and Operating Costs" above.

3. *Administration Lease*

Apportionment to telephone on the same basis as "Space Segment" above.

National Extension Cost

Whether A or B (combined international/national or separate international/national ROAs) is applicable, it should be possible to identify and apportion costs for the national network which relate to the extension of the international telephone service only.

Cost of Funds Invested

1. *Interest and Charges on Borrowed Funds*

Cost of interest and charges on borrowed funds for investment made in the international telephone network.

2. *Reasonable Return on Own Investment*

A reasonable return on own investment based on the net fixed assets employed in the international telephone service (a return for that portion of assets assigned to the international telephone service from the national extension should also be included).

II **Indirect Costs**

A. *General Administration (non-facility)*

B. *Appropriate Taxes or Equivalent*

A reasonably accurate apportionment methodology to allocate indirect costs to the telephone service is Activity Based Costing (ABC). This methodology involves the surveying of staff to determine what proportion of their time (and therefore associated costs such as building, support services, transport, travel, office equipment etc) is spent on the telephone service versus other services. This proportion can then be used to allocate total indirect costs to the telephone service.

Apportionment of indirect costs to the telephone service based on the number of workforce directed to the telephone service to the total number of workforce would be an alternative method.

However, in the absence of other more accurate methodologies, apportionment of indirect costs to the telephone service based on the proportion of telephone direct cost to total direct cost would be appropriate.

III **Other Related Costs**

Other costs may qualify for inclusion by bilateral agreement, e.g

Temporary Alternative Routing (Overflow)

The following apportionment methodology provides a per minute world average cost of incoming transit where D.155 divisioning is observed.

World incoming terminal traffic received via Overflow routes * 1/2 Average
Transit Fee

World incoming total telephone traffic

per minute

Direct and Indirect R&D Costs

Methodologies outlined in I or II would provide a guideline depending on whether the cost was direct or indirect for these costs.

B. INDIRECT RELATIONS

Where the PRIMARY route between two ROA's requires a switched transit provider (or providers) to onpass traffic between the origin and destination, then from the perspective of the destination, the cost to terminate IDD traffic received on an indirect route can be broken into two elements:

I IDD Direct Relation Cost on the Route from the last Switched Transit Provider

This cost is calculated with reference to Section A of this paper.

II Switched Transit Costs

*Under Recommendation D.155 accounting rate apportionment on a Switched transit relation, the origin and destination share the switched transit provider's charge equally. Therefore the destination's cost should include half the switched transit provider's charge.**

** If multiple transit carriers are used, then the destination's cost is half the sum of the Transit providers' published charges.*

The addition of elements I) and II) provides the effective cost to the destination of terminating such inward IDD traffic on an indirect route. As a result, the inward costs associated with a given origin will differ depending on the route's cost with, and charges levied by, different switched transit providers.

SECTION B Methodology To Determine The World Average Cost Per Minute Terminate Incoming IDD Telephone Traffic

The following section provides a methodology to calculate incoming costs on a per minute basis adopted by the TAS Group.

With reference to the list of cost elements used in terminating IDD telephone traffic, as previously noted, other non-telephone services (private leases, telex, packet switching etc) also utilise some of these elements. Using the above methodology, each ROA is able to determine the cost of each of these elements, a total cost of the IDD elements used in providing the total telephone service will be provided for the year (note that some costs may already be expressed as a per minute figure, eg incoming transit and national extension, and therefore need to be excluded until later in the exercise).

It is important to recognise that these IDD elements are also used to provide all other telephone services, for example person to person, station to station, collect, toll free, Country Direct etc. Furthermore outgoing and incoming traffic of all these telephone services utilise these elements equally.

Therefore, the total cost of IDD elements should be divided by the ROA's total annual world bothway (incoming, outgoing and transiting) total telephone traffic. This per minute figure (added to per minute costs eg incoming transit and national extension) represents the ROA's world average per minute cost to terminate incoming IDD traffic.

ROA's World Average Per Minute Cost to Terminate Incoming IDD Traffic =

$$\frac{\text{Total Costs Apportioned to IDD Elements of the Telephone Service}}{\text{ROA's World Bothway (Incoming, Outgoing and Transiting) Total Telephone Traffic}}$$

+ Per Minute Costs (eg incoming transit and national extension)

In the case where an ROA is unable to determine costs on a stream basis, the above world average cost per minute to terminate incoming IDD telephone traffic can be used in bilateral negotiation and adjusted for stream specific characteristics by agreement.

SECTION C Stream Costing

Each ROA where possible may calculate the cost of each element on a stream basis, using the apportionment methodology below. However, it is recognised that some cost elements are either too difficult or not appropriate to apportion on a stream basis; in this case the world average cost may be used. The combination of stream costs and world average costs as detailed in Section C, Part 2, may be used to determine individual stream costs.

PART 1 Apportionment Of Telephone Costs By Stream

The following Section deals with a stream apportionment methodology adopted by the TAS Group.

Depending on the detail of information possessed by a ROA, it is possible to determine the per minute cost to terminate incoming traffic from each direct stream *and each indirect route*. This can be achieved by apportionment of the cost elements results obtained in Section A on a stream basis where possible as detailed below.

A. DIRECT RELATIONS

I Direct Costs

Facility, Investment & Operating Costs

1. International Exchange

- *International Telecommunication Maintenance and Operation Centre*

$$\frac{\text{Number of Derived Telephone Circuits On Stream}}{\text{Total Derived Telephone Circuits To The World}} * \text{Total ITM\&OC Cost}$$

Total ITM&OC costs should be apportioned to the telephone service according to reasonable methodology such as the ratio of the number of circuits by which the establishment of international circuits for the telephone is reasonably made distinct.

- *Telephone Exchange*
- *Associated Transmission & Signalling Equipment*

World Average Cost may be used.

2. *Earth Station*

Earth Station Telephone Costs Apportioned to Stream =

$$\frac{\text{Stream Telephone Satellite Bearer Capacity}}{\text{Total Telephone Satellite Bearer Capacity to the World}} * \text{Earth Station Telephone Cost}$$

The bearer capacity basis may be substituted, when appropriate, by the number of circuits whereupon this method is named the stream number of circuits basis.

3. *Cable Station*

(Refer Section A for definition of Portions A & B)

Portion A of the Cable Station Telephone Cost Apportioned to Stream =

$$\frac{\text{Stream Telephone Cable A Bearer Capacity}}{\text{Total Telephone Cable A Bearer Capacity}} * \text{Portion A Cable Station Telephone Cost}$$

Portion B of the Cable Station Telephone Cost Apportioned to Stream =

$$\frac{\text{Stream Telephone Cable B Bearer Capacity}}{\text{Total Telephone Cable B Bearer Capacity}} * \text{Portion B Cable Station Telephone Cost}$$

4. *Submarine/Terrestrial cable system cost*

Total Submarine/Terrestrial Telephone Costs apportioned to Stream =

$$\frac{\text{Stream Telephone Submarine/Terrestrial Bearer Capacity}}{\text{Total Telephone Submarine/Terrestrial Bearer Capacity}} * \frac{\text{Total Cable Submarine}}{\text{Terrestrial Bearer Capacity}}$$

5. *National Links Between Earth Stations and Cable Landing Station and International Exchanges and Between International Exchanges*
Apportioned to stream on the above mentioned stream bearer capacity basis.

6. *International Terrestrial Radio Links*

Apportioned to stream on the above mentioned stream bearer capacity basis.

Rental and Lease Cost

1. *Space Segment*

Telephone space segment rental costs should be able to be identified on a stream basis and therefore can be easily apportioned to a stream. Where a satellite bearer is shared between streams the apportionment to telephone can be achieved on a sub-bearer capacity basis.

2. *Facilities Where Applicable*

The telephone lease cost of facilities can be apportioned to stream using the methodology outlined in "Facility Investment and Operating Costs" above.

3. *Administration Lease*

Apportionment to a stream on the same basis as "Space Segment" above.

National Extension Cost

World Average Cost may be used.

Cost of Funds Invested

1. *Interest and Charges on Borrowed Funds*

World Average Cost may be used.

2. *Reasonable Return on Own Investment*

World Average Cost may be used.

II Indirect Costs

World Average Cost may be used.

III Other Related Costs

Other costs may qualify for inclusion by bilateral agreement, e.g

Temporary Alternative Routing (Overflow Transit)

The following apportionment methodology provides a per minute world average cost of incoming transit where D.155 divisioning is observed.

Stream incoming terminal traffic received via Overflow routes * 1/2 Average

Transit Fee

Stream incoming total telephone traffic

per minute

Direct and Indirect R&D Costs

Methodologies outlined in I or II would provide a guideline depending on whether the cost was direct or indirect.

B. INDIRECT RELATIONS

Where the PRIMARY route between two ROA's requires a switched transit provider (or providers) to onpass traffic between the origin and destination, then from the perspective of the destination, the cost to terminate IDD traffic received on an indirect route can be broken into two elements:

I IDD Direct Relation Cost on the Route from the last Switched Transit Provider

This cost is calculated with reference to Part A of Section C of this paper.

II Switched Transit Costs

Under Recommendation D.155 accounting rate apportionment on a Switched transit relation, the origin and destination share the switched transit provider's charge equally. Therefore the destination's cost should include half the switched transit provider's charge.*

* If multiple transit carriers are used, then the destination's cost is half the sum of the Transit providers' published charges.

The addition of elements I) and II) provides the effective cost to the destination of terminating such inward IDD traffic on an indirect route. As a result, the inward costs associated with a given origin will differ depending on the route's cost with, and charges levied by, different switched transit providers.

PART 2 Methodology To Determine The Stream Cost Per Minute To Terminate Incoming IDD Telephone Traffic

A. Direct Relations

1. Those cost elements which can be apportioned by stream are divided by the ROA's annual bothway (incoming, outgoing and transiting) total telephone traffic on that stream.
2. Those cost elements which are unable to be apportioned by stream (labelled "Extremely difficult to apportion by stream") are divided by the ROA's annual world bothway (incoming, outgoing and transiting) total telephone traffic.
3. Those elements which are already expressed as a per minute cost (eg incoming transit and national extension).

The per minute results of 1, 2 and 3 are added to produce the cost per minute to terminate incoming IDD telephone traffic on that stream. This per minute figure is likely to be different on each stream and provides a more accurate result than the world average result discussed in Section B. This is due to the fact that the stream apportionment method takes account of the different traffic levels, facilities employed and circuit efficiencies between streams.

ROA's Stream Per Minute Cost To Terminate Incoming IDD Traffic =

$$\begin{array}{r} \text{Telephone Costs Apportioned by Stream} \\ \hline \text{ROA's Stream Bothway (Incoming, Outgoing and Transiting) Total Telephone} \\ \text{Traffic} \\ + \\ \hline \text{Telephone Costs Not Apportioned by Stream} \\ \hline \text{ROA's World Bothway (Incoming, Outgoing and Transiting) Total Telephone} \\ \text{Traffic} \\ + \\ \hline \text{Per Minute Costs (eg incoming transit and national extension)} \end{array}$$

B. Indirect Relations

Where the PRIMARY route between two ROA's requires a switched transit provider (or providers) to onpass traffic between the origin and destination, then from the perspective of the destination, the cost to terminate IDD traffic received on an indirect route can be broken into two elements:

I IDD Direct Relation Cost on the Route from the last Switched Transit Provider

This cost is calculated with reference to Part 2 of Section C of this paper.

II Switched Transit Costs

*Under Recommendation D.155 accounting rate apportionment on a Switched transit relation, the origin and destination share the switched transit provider's charge equally. Therefore the destination's cost should include half the switched transit provider's charge.**

** If multiple transit carriers are used, then the destination's cost is half the sum of the Transit providers' published charges.*

The addition of elements I) and II) provides the effective cost to the destination of terminating such inward IDD traffic on an indirect route. As a result, the inward costs associated with a given origin will differ depending on the route's cost with, and charges levied by, different switched transit providers.

C. Questionnaire on costs for inward IDD service in direct and transit relations and current inpayment rate

1. Direct relations

Data for TAS countries	Number of direct relations	Average cost orientated inpayment rate requested (SDR)	Current inpayment rate being received (SDR)
0 to 3000 km			
3001 to 6000 km			
over 6000 km			

2. Transit relations

Data for TAS countries	Number of transit relations	Average cost orientated inpayment rate requested (SDR)	Current inpayment rate being received plus half published transit fee (SDR)
0 to 3000 km			
3001 to 6000 km			
over 6000 km			

Note 1 - Conversion : 3.061 GF = 1 SDR

Averages are straight averages and not weighted; example :

0-3000 km	If 5 countries with cost rates of 0.35, 0.39, 0.36, 0.32 and 0.41 then average is 0.3666 SDR.	Actual current as at 1 January 1995 Inpayment 0.47, 0.49, 0.48, 0.62, 0.54 then average is 0.52 SDR.
-----------	---	--

Note 2 - The distances are those distances between capitals of countries in Asia and Oceania and as shown in TSB Collective letter 8/TAS, Annex 3.

Annex 4
(to Part I)

SOURCE : JABATAN TELEKOM MALAYSIA

TITLE : REGULATING THE MALAYSIAN TELECOMMUNICATIONS INDUSTRY IN A
MULTI-OPERATOR ENVIRONMENT

INTRODUCTION

In 1987, Malaysia restructured its Telecommunications Organisation and transferred its operating function, mainly services to a private company. Telekom Malaysia Berhad, while Jabatan Telekom Malaysia (JTM) the Government body was established to regulate the industry. Today, the world including ITU, recognises and recommends that the two functions should be separated as a first step to promote greater efficiency in the telecommunication industry.

HISTORICAL OVERVIEW OF PRIVATISATION

In 1985 and 1986, the planners were preoccupied with the viability of the then to be privatized entity. Scant attention was paid to the regulatory body. This will continue to haunt JTM for the number of staff can be addressed, but solving the quality or expertise equation will be difficult. JTM have to face challenge of a growing shortage of key skilled people. Another shortcoming is the underlining assumption that all regulatory bodies carry out more or less the same functions, that is economic and technical regulations. For example, the assumption that if OFTEL has 100 staff, the Malaysian regulatory body should have not more than 100 staff; without realising that frequency management is the function of the Radio Agency (RA) and Technical Compliance is the function of British Approval Board of Telecommunications (BABT). The planners did not realise that JTM is a one-stop shopping centre for all matters relating to Telecommunications. And we believe this is the right direction for regulatory bodies in the developing countries. This concept facilitates efficiency in licensing, planning and coordination of the requirements of the licensees and the needs of the users.

Telekom Malaysia Berhad (TMB) was registered as a 100% Malaysian Government-owned company to take over the function of operating and managing the telecommunication services and infrastructure in Malaysia. TMB exercises its activities and responsibilities under the terms of a licence issued by the Minister. The terms and conditions of the licence are judicious mix of rights granted and obligations imposed on TMB. It stipulates some of the activities which the Company is expected to undertake.

The next step in the privatisation process was the disbursement of equity and approximately 25% was sold and listed on the Malaysia Stock Exchange on November 1990.

Over the past few years, Malaysia has embarked on introducing more players in the market place. The Government is promoting competition in order to establish a more dynamic and efficient telecommunication infrastructure and has opened up even the basic services including the local, long distance and international sectors to competition. The evolution of competition and regulation is at a crucial stage. On the one hand, we have established policy initiative which is now starting to have a real effect in the market place. We are now on the threshold of seeing some form of competition even in the basic services. On the other hand, we have to design the necessary regulatory rules for a multi player environment. There will be rationalisation resulting in many strategic alliances to meet the needs of the consumer-driven information age, fully aware that no single company can alone be a successful player.

The new multi-player environment creates new responsibilities for JTM in dealing with the inevitable tensions between the rights and obligations of consumers and carriers, of service providers and carriers, and of one network provider against another. As a result, the information requirement for strategic, decision-making, pricing, investment, and regulatory support is an exploding and controversial subject. Costing questions are often at the centre of the controversy.

JTM's position is of paramount importance amidst accelerating change in the new multi-player environment. In the past twelve months, we have been at the centre of change, with the difficult task of arbitrating or balancing competing interests. In the next twelve months, the tensions will mount as the stakes get higher and as services come on stream from the competing network operators. The prescriptions for Malaysia may not be suitable for another environment but the "lessons from experience" should help us avoid certain legal, economic and technical minefields.

COMPETITION POLICY

DEREGULATION

Liberalisation and privatisation raise the management of change. Each nation has a different set of values, circumstances and priorities that dictate the nature of the changes and the rate at which they should occur. The changes must be managed and regulated in a timely manner.

During the early years of the privatized era, much have happened to demonstrate that the expectations and perceptions of the privatized entity and the regulator differ in many ways. In certain respect, these differences are of a fundamental nature. I would therefore recommend to any country on the verge of privatization to map out clearly the policies applicable in the privatized environment and the direction for the privatised entity in order to avoid these differences in expectations. The policies mapped out should include the future competition policy with a sunset clause on the monopolistic environment.

REGULATORY MODELS

The world is characterized by a wide diversity of regulatory structures, ranging from the traditional state-run PTTs to a highly competitive environment with minimal government interference. The basic design of a regulatory regime is strongly conditioned by country-specific features. The choice of the regulatory structure must be seen within a broader framework of the country's political and governmental system. The political system and institutions shape what regulatory arrangements are viable and their likely effectiveness. The regulatory regime also depends on the country's broad political, economic and social objectives. In particular, the arrangements required to support telecommunications development in an open, pro-competitive, pro-private enterprise environment are quite different from those adapted to a protected, monopolistic or state-owned telecommunications environment.

We in Malaysia, have taken a look at some of these structures and we believe that each country has to develop and evolve its own regulatory regime. For example, the OFTEL regulatory model where the Director General reports to Parliament is not likely to be acceptable to Malaysia. Each country will therefore have to develop its own regulatory model, be it a corporatised monopoly, duopoly or oligopoly.

EVOLUTION OF REGULATIONS

The convergence of the computer, telecommunication and television industries creates complexity and competition adds a further dimension. The ability to regulate an environment declines as its complexity increases and today's environment is becoming increasingly complex, and the job of regulator becomes more difficult by the day.

The fundamental problem is the conflicting policy objectives which all regulators must face. We required to liberalize the telecommunications market and at the sametime ensure the successful privatization of the PTT. The market power of the privatized PTT would contribute to the latter objective but detract from the former.

JTM has to balance the possible level of competition with the need to ensure that such competition proceeds in a way that is not contrary to the public interest and the achievement of public policy goals.

REGULATING THE MULTI-PLAYER ENVIRONMENT

LEGAL REQUIREMENT

With multi players it requires proper technical planning and coordination on the part of the regulatory body to integrate the discrete networks into one interconnected harmonious network.

In Malaysia, interconnection is mandated by law. The inherent problem of regulation is to minimize this gap and the task is made difficult by information problems. We have attempted "tight handed" regulation the past in order to maintain flexibility, but that may no longer be possible in a multi-player environment. We may need to review the legal issues and the powers and functions if the regulatory authority may have to be considerably enhanced in order to enable the regulatory authority to enforce compliance to technical and economic determinations and directions.

Such legal empowering of the regulatory authority is imperative in order to ensuring harmonisation and orderly development of the telecommunication infrastructure in a multi-player environment.

INTERCONNECTION REGULATIONS

We have worked together with all the players, including the dominant operator for nearly a year, to hammer out a document called the "General Framework For Interconnection And Access". This will be developed into Interconnection Regulations in order to ensure that access to all networks is open, economical and cost-based. The interconnection framework will promote the development of an efficient infrastructure to support national goals.

We recognise that in the absence of an interconnection framework, it can result in:-

- exclusion or unnecessary delay of competitors from bottleneck facilities or discrimination in providing access to network components and services;
- price discrimination and raising of costs to competitors by charging fully allocated cost, excessive leased line charges etc;
- imposition of discriminatory technical terms and conditions of interconnection; and
- over-charging competitors for access to its network in the name of universal service obligations.

We are confident that all the necessary rules will be in place very soon in order to enable the various players to launch their new services.

In a multi-player environment, we are preoccupied with the problem of unnecessary duplication of resources, resulting in excessive over capacities. This is not evidences in duopoly situation. Hence interconnection charges will be set so as to :-

- promote efficient and sustainable competition for the benefit of customers; and

- encourage the use of an existing network when to do so is economically efficient, rather than encourage the wasteful duplication of resources.

CONCLUSION

In the new environment, the regulatory role seems to have shifted from promoting the interests of the users to that of an arbiter of interests, ensuring that the forces of competition can work effectively. The issue is how to manage the use of technology and encourage investment in a way that delivers benefits to the users and the achievement of public policy goals. Each country will have to address this issue and evolve its own regulatory structure just as we in Malaysia are attempting to put ours in place.

Traditionally the division of the network into local access, long distance and assumption that long distance and international are profitable and local access unprofitable. Competitors are therefore moving into long distance and international for short term gains, and ultimately they will have to pay the price.

We in Malaysia certainly believe that the competitors should develop their own subscriber base, using the new technologies available so that they are not left at the mercy of the dominant form. Certainly it is impossible for the regulator to provide a completely level playing field. We believe that economies and competitors should be given a chance to work and regulations should not be used to uphold obsolete and inefficient market structures.

PART II - Modifications to Recommendation D.500 R

ACCOUNTING RATES APPLICABLE TO TELEPHONE RELATIONS BETWEEN COUNTRIES IN ASIA AND OCEANIA (revised in 1996)

When, in full of their sovereignty, the Administrations of the countries in Asia and Oceania negotiate among themselves agreements to determine the accounting rates to be applied in their telephone relations, it is recommended that they give consideration to the provisions detailed below.

1. Determination of accounting rates applicable in telephone relations between countries in Asia and Oceania

1.1 In traffic relations where analytical cost data is available, such data should form the basis for bilateral negotiations as provided for in the ITU Regulations and ITU-T Recommendation D.140. However, where such data cannot be made available, the following distance based maximum accounting rates are recommended¹ :

Zone	Distance	Maximum accounting rate per minute
1	0 to 3000 km	0.82
2	3001 to 6000 km	0.96
3	over 6000 km	1.02

1.2 Notwithstanding the maximum accounting rate levels shown above, Administrations should endeavor to achieve cost-orientated accounting rates.

1.3 The distances indicated in the above scale are those between the appropriate international exchanges in the originating and destination countries.

1.4 It is also recommended that each country should normally constitute a single area for the purpose of fixing accounting rates. However, in relations between adjacent countries, a country may be divided into several areas. In this case, the number of such areas for international traffic should be reduced to a minimum.

1.5 It is recognized that in some cases, such as transit switched services, Administrations may apply rates which reflect additional costs.

¹The accounting rates given in this Recommendation are expressed in the monetary unit of the International Monetary Fund (IMF), the Special Drawing Right (SDR).

In accordance with the International Telecommunication Regulations, the gold franc is equivalent to 1/3.061 SDR.